



# SOURIAU

## Overmoulded Cable assemblies

# Overmoulded Cable assemblies

## Range overview

SOURIAU has provided connectors for various applications in the most extreme environments for more than 90 years. Conscious of the difficulties in finding a quick and a reliable harness manufacturer, we took the decision to develop in house cable assembly production capabilities to help our customers shorten their supply chain, and to take advantage of the «best in class» quality of the SOURIAU group. Cable assembly production is a process that can further enhance the properties of our connector products, especially over many years of use. Overmoulding provides the opportunity to change the cable exit from straight through 90 degrees and avoid any stress on the cable terminated to the connector; in addition to this, as the wires are encapsulated inside the moulding, a barrier is created which prevents from any liquid from entering the equipment through the connector if the cable jacket is breached.

### UTO Series: Robust Metal & Shielding Overmould



- Shielded metal connector with Nickel plating
- Extreme sealing: IP68/69K
- 3 standard layouts: 4pos, 8pos, 12pos
- Rapid 1/3 turn connection

Plating	Salt spray	Temperature <sup>(1)</sup>	Sealing	Mechanical
Black anodized	96 H	-5° C + 80° C	IP68/69K mated	500 matings/unmatings
Nickel	48 H			

### UTS Series: Waterproof IP67/IP68/IP69K Overmould



- Plastic connector
- Extreme sealing: IP68/69K
- 3 standard layouts: 4pos, 8pos, 12pos
- Rapid 1/3 turn plastic connection

Plating	Salt spray	Temperature <sup>(1)</sup>	Sealing	Mechanical
No plating	500 H	-5° C + 80° C	IP68/69K mated	250 matings/unmatings

### UTL Series: UL/IEC Power Supply Overmould



- Plastic connector
- Extreme sealing: IP68/69K
- Power supply rated by UL
- Push Pull locking mechanism with audible «click»

Plating	Salt spray	Temperature <sup>(1)</sup>	Sealing	Mechanical
No plating	≥1000 H	-5° C + 60° C	IP68/69K mated	500 matings/unmatings

### 851 Series: Mil DTL 26482 Overmould



- Metal connector
- Rapid 1/3 turn connection
- Conforms to the international standard MIL-DTL-26482G series 1

Plating	Salt spray	Temperature <sup>(1)</sup>	Sealing	Mechanical
Black Zinc nickel	500 H	-5° C + 80° C	IP68	500 matings/unmatings
Nickel	48 H	-5° C + 80° C	IP68	500 matings/unmatings
Black anodized	500 H	-5° C + 80° C	IP68	500 matings/unmatings
Cadmium	500 H	-5° C + 80° C	IP68	500 matings/unmatings

\* Contact us for more information on mating receptacle offering  
 (1) For fixed installation

# Overmoulded Cable assemblies

## UTO Robust Metal & Shielding Overmould

### Connector






- Shielded metal connector with Nickel plating
- Extreme sealing: IP68/69K
- 3 standard layouts: 4pos, 8pos, 12pos
- Other layouts on request, please consult us
- Rapid 1/3 turn connection



\* Contact us for more information on mating receptacle offering

### Cable

- TPE Jacket (Black)
- 1.5 mm<sup>2</sup> conductor
- Multi-conductor 4, 8 or 12
- 300V
- Shielded
- Flammability rating UL 94V0 Sec.1080 (VW-1)

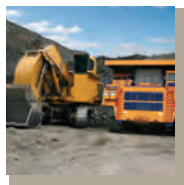
Plating	Salt spray	Temperature <sup>(1)</sup>	Sealing	Mechanical
				
Black anodized*	96 H	-5° C + 80° C	IP68/69K mated	500 matings/unmatings
Nickel	48 H			

\* Custom black anodized version available on demand  
 (1) For fixed installation

## Applications



**Industry robotics**  
**Machine tools**



**Off road - Mining**  
**Railway**



**Energy power**



**Geophysical equipment**

# Overmoulded Cable assemblies

## UTS Waterproof IP67/IP68/IP69K Overmould

### Connector






- Plastic connector
- Extreme sealing: IP68/69K
- 3 standard layouts: 4pos, 8pos, 12pos
- Other layouts on request, please consult us
- Rapid 1/3 turn plastic connection



\* Contact us for more information on mating receptacle offering

### Cable

- PVC Jacket (Grey)
- 1.5 mm<sup>2</sup> conductor
- Multi-conductor 4, 8 or 12
- 300V
- Unshielded
- Flammability rating IEC (UL1581 Sec.1160)

Plating	Salt spray	Temperature <sup>(1)</sup>	Sealing	Mechanical
				
No plating	500 H	-5° C + 80° C	IP68/69K mated	250 matings/unmatings

(1) For fixed installation

## Applications



Stage - Light



Telecom  
Data infrastructure



Instrumentation  
measurement



Building automation  
& control



Road Infrastructure



Energy power



Off road - Mining  
Railway



# Overmoulded Cable assemblies

## UTL UL/IEC Power Supply Overmould

### Connector






- Plastic connector
- Extreme sealing: IP68/69K
- Power supply rated by UL
- Push pull locking mechanism



### Cable

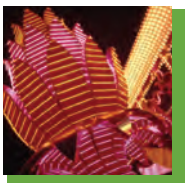
- H07RN-F: 750V
- Outer sheath: rubber compound EM2 in acc. to HD 22.1 that is VDE 0282 part 1
- Colour outer sheath: black
- Core section: 2.5mm<sup>2</sup>
- Flame retardant in acc. to IEC 60332-1-2 resp. VDE 0482 part 332-1-2
- Resistant to Oil, Solvents, Water, Ozone, aging and abrasion

\* Contact us for more information on mating receptacle offering

Plating	Salt spray	Temperature <sup>(1)</sup>	Sealing	Mechanical
				
No plating	≥1000 H	-5° C + 60° C	IP68/69K mated	500 matings/unmatings

(1) For fixed installation

## Applications



Stage - Light



Road Infrastructure



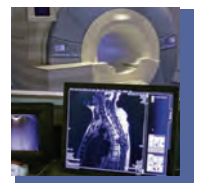
Telecom  
Data infrastructure



Building automation  
& control



Energy power



Medical

# Overmoulded Cable assemblies

## 851 Mil DTL 26482 Overmould

### Connector

- Shielded metal connector
- Sealing: IP68
- 4 standard layouts:  
4pos, 6pos, 10pos, 19pos
- Other layouts on request,  
please consult us
- Rapid 1/3 turn connection
- Conforms to the international  
standard MIL-DTL-26482G  
series 1



### Cable

- TPE (Black)
- 16 AWG conductors
- Multi-conductor 10, 12 or 14
- 300V
- Shielded
- Flammability rating UL 1581  
Sec.1080 (VW-1)

\* Contact us for more information  
on mating receptacle offering

Plating	Salt spray	Temperature <sup>(1)</sup>	Sealing	Mechanical
Black Zinc nickel	500 H	-5° C + 80° C	IP68	500 matings/unmatings
Nickel	48 H	-5° C + 80° C	IP68	500 matings/unmatings
Black anodized	500 H	-5° C + 80° C	IP68	500 matings/unmatings
Cadmium	500 H	-5° C + 80° C	IP68	500 matings/unmatings

(1) For fixed installation

## Applications



Geophysical  
equipment



Instrumentation  
measurement



Industry robotics  
Machine tools



Off road - Mining  
Railway

# Overmoulded Cable assemblies

## Custom products

Cable assemblies are often designed for specific applications, and sometimes need to be specially constructed in order to meet precise electrical and environmental requirements. This can involve the use of cable with particular characteristics, cut to specific lengths and sometimes, terminated to special connectors.

Whether your needs are for power or signal, using copper, coaxial or fibre optic cable, SOURIAU is ready to deliver professionally manufactured and fully tested solutions specially designed to meet your requirements, whatever the application.

### Construction:

- Metal and plastic connector
- Plug or receptacle cable assemblies
- Data or power cables
- PUV, PVC or Rubber cable
- Additional customised connector
- Custom length
- Optical or coax cable assemblies



Harness with custom cable



Optical harnesses



Y or T shape connection



Harness with double ends



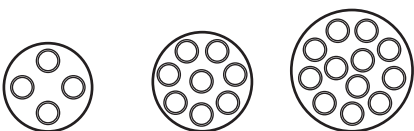
Curly cable harnesses



Harness for PCB connection

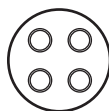
## SOURIAU standard connector layout

### UTO & UTS



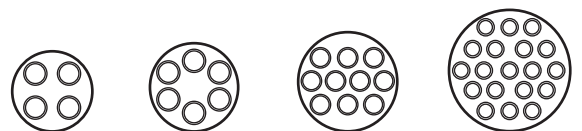
Size 10, 4 Pos Size 12, 8 Pos Size 14, 12 Pos

### UTL



Size 10, 3 Pos + ground

### 851



Size 8, 4 Pos Size 10, 6 Pos Size 12, 10 Pos Size 14, 19 Pos

# Overmoulded Cable assemblies



## SOURIAU capabilities

### Manufacturing locations

SOURIAU has established global manufacturing locations, testing facilities and sales and engineering offices to provide our domestic and international customers with a local presence. In addition, SOURIAU products can be purchased through a vast network of authorised distribution partners.

### Quality assurance

- Cable assemblies are manufactured & inspected according to the requirements of IPC/WHMAA-620 and SOURIAU personnel are trained annually by certified IPC instructors.
- Our quality system is based on the requirements of AS9100 and First Article Inspection reports are created in accordance with AS9102.
- SOURIAU has its own independent test center recognised by many national standard laboratories, and can qualify programs to UL, CSA, VDE and EN.



### High speed signal integrity

- SOURIAU is a world leader in signal integrity measurement and control, and can provide certification testing for all major protocols including: CAT 5, 5E, RS-485.
- Testing capability includes full certification reports with NEXT, FEXT, impedance, and attenuation to 40 GHz.
- Crosstalk for mixed power and signal assemblies can be provided to meet your system needs. Measurement capabilities include both time and frequency domains to meet a broad spectrum of applications.

### Wiring

Class 3 for Harsh Environments is our focus, but Class can be selected based on your application.

- Class 1 - General Electronic Products (applications or requirements for assembly function)
- Class 2 - Dedicated Service Electronic Products (for continued performance and extended life requirements where uninterrupted service is desired)
- Class 3 - High Performance Electronic Products (for applications where downtime is not tolerated and the environment is harsh).

### Overmould

SOURIAU is able to test its overmoulded harness in accordance with your system requirements and provide qualification test reports. Test capabilities include vibration, temperature, flexing and shock tests.

# SOURIAU

[www.souriau-industrial.com](http://www.souriau-industrial.com)

[contactindustry@souriau.com](mailto:contactindustry@souriau.com)